

Use Attainability Analysis

for

WBID 3197 Dick's Fork

Submitted by  
SES Inc.

to

Missouri Department of Natural Resources  
Water Protection Program

Date received: October 26, 2007

**Field Data Sheets for Recreation Use Stream Surveys**

**Data Sheet A - Water Body Identification**

**I. Water Body Information** (For water body being surveyed)

Water Body Name (from USGS 7.5' quad): Dicks Fork	
Missouri Water Body Identification (WBID) Number:	3197
8 digit HUC code: 11070207	County: Barton
Upstream Legal Description (from Table H): T32N R31W 28	
Downstream Legal Description (from Table H): T31N R31W 23	
Number of sites evaluated:	3
List all site numbers, listed consequently upstream to downstream:  1, 2, 3	

**Site Locations Map(s):** Attach a map of the entire segment with assessment sites clearly labeled.  
Mark any other items that may be of interest.

**II. Facility Information** (list all permitted discharges to the water body segment)

Facility Name(s) and Permit Number(s):  Lamar closed Sanitation Landfill  MO0110272
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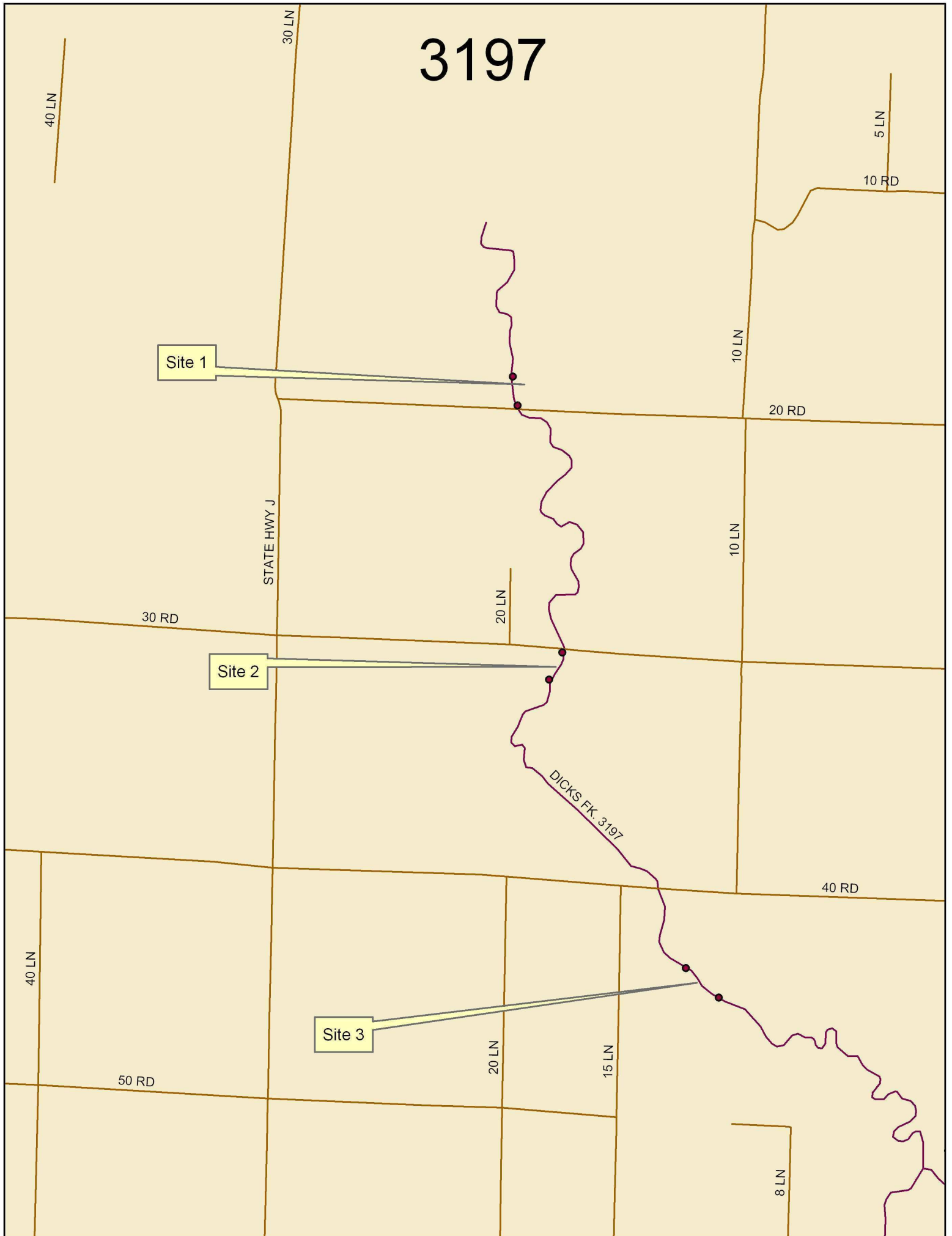
**III. UAA Surveyor** (please print legibly)

Name of Surveyor: Aaron Ball	Telephone Number: (913)307-0046
Organization/Employer: SES, Inc.	

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

**Signed:** Aaron Ball **Date:** 10/23/2007

3197



WBID # 3197  
 Site # 1

**Field Data Sheets For Recreational Use Stream Surveys**

**Data Sheet B-Site Characterization**

Date & Time: 9/25/07 1:30	Site Location Description (e.g. road crossing):
Personnel: Larissa Brown, Aaron Ball	Upstream of Road 20 crossing
Current Weather Conditions: Rainy	Facility Name: Lamar Closed Sanitation Landfill
Weather conditions for the past 10 days: 4 in rain	Permit Number: MO0110272
Drought conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

Location Coordinates (Universal Transverse Mercator Projection, in Meters)			
Site 01	Easting (UTM X):	Northing (UTM Y):	Horizontal Accuracy: Meters
	0381864	4143364	
Site 11	Easting (UTM X):	Northing (UTM Y):	Horizontal Accuracy: Meters
	0381899	4148163	

**Photos:**

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
30	Downstream	31	Upstream		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water Skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe:				

WBID # 3197  
Site # 1

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B- Site Characterization (Continued)**

**Surrounding Conditions:**

<input type="checkbox"/> City/County parks	<input type="checkbox"/> playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National Forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkways
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Steep Slopes	<input type="checkbox"/> Other:

Comments:

**Evidence of Human Use:**

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot path/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV/ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock watering

comments/other:

None

**Substrate:**

% Cobble	% Gravel	% Sand	70	% Silt	30% Mud/Clay	% Bedrock
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**Aquatic Vegetation:**

duckweed, 3% coverage

**Water Characteristics:**

Odor:	<input type="checkbox"/> Sewage	<input checked="" type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input checked="" type="checkbox"/> Milky	<input checked="" type="checkbox"/> Other
					Black
Bottom Deposit:	<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

WBID # \_\_3197\_\_\_\_\_  
Site # \_\_\_\_1\_\_\_\_

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B - Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

None

**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature: Aaron Ball Date of Survey: 9/25/2007

Organization: SES, Inc. Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>3197</u> Site #: <u>1</u>  Estimated Channel Incision: <u>2</u> (m) (height between low bank width and water)  GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) <b>01</b> UTM X: <u>0381864</u> UTM Y: <u>4143364</u> +/- <u>          </u> (meters) <b>11</b> UTM X: <u>0381899</u> UTM Y: <u>4148163</u> +/- <u>          </u> (meters)  Average Stream Width: <u>7</u> (meters)      Length of Survey Segment: <u>140</u> (meters) (To determine Length of Reach)      (20x average stream width)  Field Staff: <u>Larissa Brown, Aaron Ball</u>	<b>Dissolved Oxygen</b>  Date: <u>9/25/07</u> Time: <u>1:30</u>  Dissolved Oxygen: <u>4.3</u> (mg/L)  Dissolved Oxygen: <u>          </u> (% sat)  Specific Cond: <u>          </u> (µS/cm)  Water Temperature: <u>23.7</u> (°C)
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### Transect Cross-Section

Station	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
<b>Left Bank</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.7	0.1	0.7	0.35	0.7	0.6	0.4	0.1	0.5	0.45	0.3	0.45	0.6	0.4	0.4	0.25	0.6	0.1	0.3	0.05	0.3	0.2
2	1.4	0.3	1.4	0.5	1.4	0.65	0.8	0.15	1	0.5	0.6	0.7	1.2	0.5	0.8	0.3	1.2	0.2	0.6	0.1	0.6	0.25
3	2.1	0.3	2.1	0.6	2.1	0.6	1.2	0.2	1.5	0.6	0.9	0.6	1.8	0.65	1.2	0.5	1.8	0.25	0.9	0.1	0.9	0.3
4	2.8	0.35	2.8	0.65	2.8	0.7	1.6	0.25	2	0.6	1.2	0.6	2.4	0.65	1.6	0.3	2.4	0.3	1.2	0.1	1.2	0.3
5	3.5	0.4	3.5	0.7	3.5	0.7	2	0.25	2.5	0.6	1.5	0.5	3	0.65	2	0.3	3	0.35	1.5	0.1	1.5	0.25
6	4.2	0.35	4.2	0.8	4.2	0.7	2.4	0.2	3	0.6	1.8	0.4	3.6	0.7	2.4	0.3	3.6	0.4	1.8	0.15	1.8	0.2
7	4.9	0.35	4.9	0.65	4.9	0.65	2.8	0.2	3.5	0.6	2.1	0.5	4.2	0.7	2.8	0.3	4.2	0.35	2.1	0.15	2.1	0.15
8	5.6	0.35	5.6	0.7	5.6	0.6	3.2	0.2	4	0.5	2.4	0.5	4.8	0.6	3.2	0.15	4.8	0.25	2.4	0.15	2.4	0.1
9	6.3	0.2	6.3	0.6	6.3	0.3	3.6	0.1	4.5	0.3	2.7	0.4	5.4	0.4	3.6	0.15	5.4	0.15	2.7	0.15	2.7	0.05
<b>Right Bank</b>	7	0	7	0	7	0	4	0	5	0	3	0	6	0	4	0	6	0	3	0	3	0
<b>Feature Type</b> (riffle, run, or pool)	pool		pool		pool		pool		pool		pool		pool		pool		pool		pool		pool	

**Notes:** Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Signed: Aaron Ball      Date: 9/25/07

WBID # 3197  
 Site # 2

**Field Data Sheets For Recreational Use Stream Surveys**

**Data Sheet B-Site Characterization**

Date & Time: 9/25/07 4:00pm	Site Location Description (e.g. road crossing):
Personnel: Larissa Brown, Aaron Ball	30 RD crossing
Current Weather Conditions: Rain, cloudy	Facility Name: Lamar closed Sanitation Landfill
Weather conditions for the past 10 days: 4 in rain	Permit Number: MO0110272
Drought conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

Location Coordinates (Universal Transverse Mercator Projection, in Meters)			
Site 01	Easting (UTM X):	Northing (UTM Y):	Horizontal Accuracy: Meters
	0382210	4146443	
Site 11	Easting (UTM X):	Northing (UTM Y):	Horizontal Accuracy: Meters
	0382119	4146252	

**Photos:**

Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
32	Upstream	33	Downstream		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water Skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe:				



WBID # 3197  
Site # 2

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B- Site Characterization (Continued)**

**Surrounding Conditions:**

<input type="checkbox"/> City/County parks	<input type="checkbox"/> playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National Forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkways
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Steep Slopes	<input type="checkbox"/> Other:

Comments:

**Evidence of Human Use:**

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot path/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV/ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock watering

comments/other:

None

**Substrate:**

% Cobble	15	% Gravel	% Sand	30	% Silt	40%	Mud/Clay	15	% Bedrock
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**Aquatic Vegetation:**

None

**Water Characteristics:**

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

WBID # \_\_3197\_\_\_\_\_  
Site # \_\_\_\_2\_\_\_\_

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B - Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

None
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**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature: Aaron Ball Date of Survey: 9/25/2007

Organization: SES, Inc. Position: Field Team Leader

## Data Sheet C - Field Survey Results

Transect Cross-Section

**Notes:** Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width.

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Signed: Aaron Ball Date: 9/25/07

WBID # 3197  
 Site # 3

**Field Data Sheets For Recreational Use Stream Surveys**

**Data Sheet B-Site Characterization**

Date & Time: 9/25/07                      5:15	Site Location Description (e.g. road crossing):
Personnel: Larissa Brown, Aaron Ball	Downstream from RD 40 crossing
Current Weather Conditions: Rain/cloudy	Facility Name: Lamar Closed Sanitation Landfill
Weather conditions for the past 10 days: 4 in rain	Permit Number: MO0110272
Drought conditions?: No drought <input checked="" type="checkbox"/> ; Phase I <input type="checkbox"/> ; Phase II <input type="checkbox"/> ; Phase III <input type="checkbox"/> ; Phase IV <input type="checkbox"/> ; Unknown <input type="checkbox"/>	

**Site Location:**

Location Coordinates (Universal Transverse Mercator Projection, in Meters)			
Site 01	Easting (UTM X):	Northing (UTM Y):	Horizontal Accuracy:                      Meters
	0383071	4144243	
Site 11	Easting (UTM X):	Northing (UTM Y):	Horizontal Accuracy:                      Meters
	0383301	4144034	

**Photos:**

Photo ID#	Photo Purpose	Photo ID#:	Photo Purpose	Photo ID#:	Photo Purpose
34	Downstream	35	Upstream		
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

**Uses Observed:**

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water Skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:
Describe:				

WBID # 3197  
Site # 3

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B- Site Characterization (Continued)**

**Surrounding Conditions:**

<input type="checkbox"/> City/County parks	<input type="checkbox"/> playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Rural Residential
<input type="checkbox"/> Campgrounds	<input type="checkbox"/> State parks	<input type="checkbox"/> National Forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkways
<input type="checkbox"/> Boating accesses	<input checked="" type="checkbox"/> Fence	<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Steep Slopes	<input type="checkbox"/> Other:

Comments:

**Evidence of Human Use:**

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot path/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Rope swings
<input type="checkbox"/> RV/ATV Tracks	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle	<input type="checkbox"/> Livestock watering

comments/other:

None

**Substrate:**

% Cobble	15	% Gravel	15	% Sand	40	% Silt	30	% Mud/Clay	% Bedrock
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**Aquatic Vegetation:**

None

**Water Characteristics:**

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

WBID # \_\_\_\_\_  
Site # \_\_\_\_\_

**Field Data Sheets for Recreational Use Stream Surveys**

**Data Sheet B - Site Characterization (continued)**

**Additional Stream Morphology:** (Record isolated pools or other features identified during the survey that may support recreational uses)

Channel Feature	Distance from access location (m)	Width (m)	Length (m)	Median Depth (m)	Max Depth (m)

**Comments:** (Please record any additional comments here.)

None
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**Please verify that you have completed all sections, checked all applicable boxes, and that the form is complete.**

Surveyor's Signature: Aaron Ball Date of Survey: 9/25/2007

Organization: SES, Inc. Position: Field Team Leader

# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet C - Field Survey Results

Waterbody ID: <u>3197</u> Site #: <u>3</u>  Estimated Channel Incision: _____ (m) (height between low bank width and water)  GPS Location - Easting (UTM X), Northing (UTM Y), Horizontal Accuracy Estimate (EPE / PDOP / FOM) <b>01</b> UTM X: <u>0383071</u> UTM Y: <u>4144243</u> +/- _____ (meters) <b>11</b> UTM X: <u>0383301</u> UTM Y: <u>4144034</u> +/- _____ (meters)  Average Stream Width: <u>7</u> (meters)      Length of Survey Segment: <u>140</u> (meters) (To determine Length of Reach)      (20x average stream width)  Field Staff: <u>Larissa Brown, Aaron Ball</u>	<b>Dissolved Oxygen</b>  Date: <u>9/25/07</u> Time: <u>5:15</u>  Dissolved Oxygen: <u>5.5</u> (mg/L)  Dissolved Oxygen: _____ (% sat)  Specific Cond: _____ (µS/cm)  Water Temperature: <u>22.6</u> (°C)
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### Transect Cross-Section

Station	01		02		03		04		05		06		07		08		09		10		11	
	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)	Distance (m)	Depth (m)
<b>Left Bank</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0.7	0.3	0.8	1	0.7	1	0.6	1	0.8	1	0.8	1	0.9	1	0.9	1	0.7	1	0.7	1	0.8	1
2	1.4	0.5	1.6	1	1.4	1	1.2	1	1.6	1	1.6	1	1.8	1	1.8	1	1.4	1	1.4	1	1.6	1
3	2.1	0.5	2.4	1	2.1	1	1.8	1	2.4	1	2.4	1	2.7	1	2.7	1	2.1	1	2.1	1	2.4	1
4	2.8	0.7	3.2	1	2.8	1	2.4	1	3.2	1	3.2	1	3.6	1	3.6	1	2.8	1	2.8	1	3.2	1
5	3.5	0.8	4	1	3.5	1	3	1	4	1	4	1	4.5	1	4.5	1	3.5	1	3.5	1	4	1
6	4.2	1	4.8	1	4.2	1	3.6	1	4.8	1	4.8	1	5.4	1	5.4	1	4.2	1	4.2	1	4.8	1
7	4.9	1	5.6	1	4.9	1	4.2	1	5.6	1	5.6	1	6.3	1	6.3	1	4.9	1	4.9	1	5.6	1
8	5.6	1	6.4	1	5.6	1	4.8	1	6.4	1	6.4	1	7.2	1	7.2	1	5.6	1	5.6	1	6.4	1
9	6.3	0.7	7.2	1	6.3	1	5.4	1	7.2	1	7.2	1	8.1	1	8.1	1	6.3	1	6.3	1	7.2	1
<b>Right Bank</b>	7	0	8	0	7	0	6	0	8	0	8	0	9	0	9	0	7	0	7	0	8	0
<b>Feature Type</b> <small>(riffle, run, or pool)</small>	pool		pool		pool		pool		pool		pool		pool		pool		pool		pool		pool	

**Notes:** Transects will be measured beginning on left descending bank (0 depth) and finishing on right descending bank (0 depth). This width is the wetted width

GPS locations corresponds to Transect 01 and 11. Transects ordered in upstream to downstream order.

Depth measurements taken at 10 equally spaced locations along transect (determine by dividing wetted width by ten)

Mark dry depth measurements as 0; record actual measurements to 0.01 meter unless depth is too deep to measure (then record as > 1)

All measurements to be taken to the nearest 0.01 meter.

Signed: Aaron Ball      Date: 9/25/07

**WBID# 3197**



**Site# 1 Photo ID# 30, Downstream**



**Site# 1 Photo ID# 31, Upstream**



**Site# 2 Photo ID# 32, Upstream**



**Site# 2 Photo ID# 33, Downstream**



**WBID# 3197**



**Site# 3 Photo ID# 34, Downstream**



**Site# 3 Photo ID# 35, Upstream**



"Gilisa Gould"  
<ggould@ses-corp.com>

03/31/2008 04:53 PM

To "Anne Peery" <anne.peery@dnr.mo.gov>

cc

bcc

Subject RE: Yet another UAA question...

WBID #3197 Dick's Fork

According to the field team leader of this waterbody assessment, Aaron Ball, this stream was at base flow when assessed. As far as when and how much precip fell during the "last 10 days", that information was not gathered since that level of detail was not required. The total precip for the last 10 days is what was required and what was recorded.

Please send any further comments or questions for #3197 to Aaron Ball: [aball@ses-corp.com](mailto:aball@ses-corp.com)

I hope I got this to you just in time!

*Have a good day!*

Gilisa Gould  
SES, Inc., Merriam, KS  
913.307.0046 Ext. 19  
800.897.1163  
[ggould@ses-corp.com](mailto:ggould@ses-corp.com)

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**From:** Anne Peery [mailto:[anne.peery@dnr.mo.gov](mailto:anne.peery@dnr.mo.gov)]  
**Sent:** Friday, March 28, 2008 11:57 AM  
**To:** [ggould@ses-corp.com](mailto:ggould@ses-corp.com)  
**Subject:** Yet another UAA question...

Hi, Gilisa!

This one is Dick's Fork, WBID 3197. It says there was 4" of rain in the last 10 days and current conditions were "rainy". Common sense says that can't be at base flow, but the pictures aren't conclusive. The upstream pic for site 1 even looks like there is no flow upstream...

Aaron Ball signed off on this one. Do you have any information to offer to clarify whether this is baseflow or not? Like, when exactly did the 4" fall...all at once or scattered? Was the rain on the day of the survey just starting? Was it raining hard or sprinkling?

Thanks!

Good luck with your certification exams!

Anne Peery  
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